

# SERVICE DIVIDIT

This service manual explains them by extracting the different specifications from those of the PM440, based on the PM440. For both electrical and mechanical information on the after-sales service which is not stated, all information is described in the PM440 service manual. The dispatch of the parts for after-sales service has to be referred to this service manual, with the first priority.

For this reason, please use this service manual with referring to the PM440 service manual, without fail.

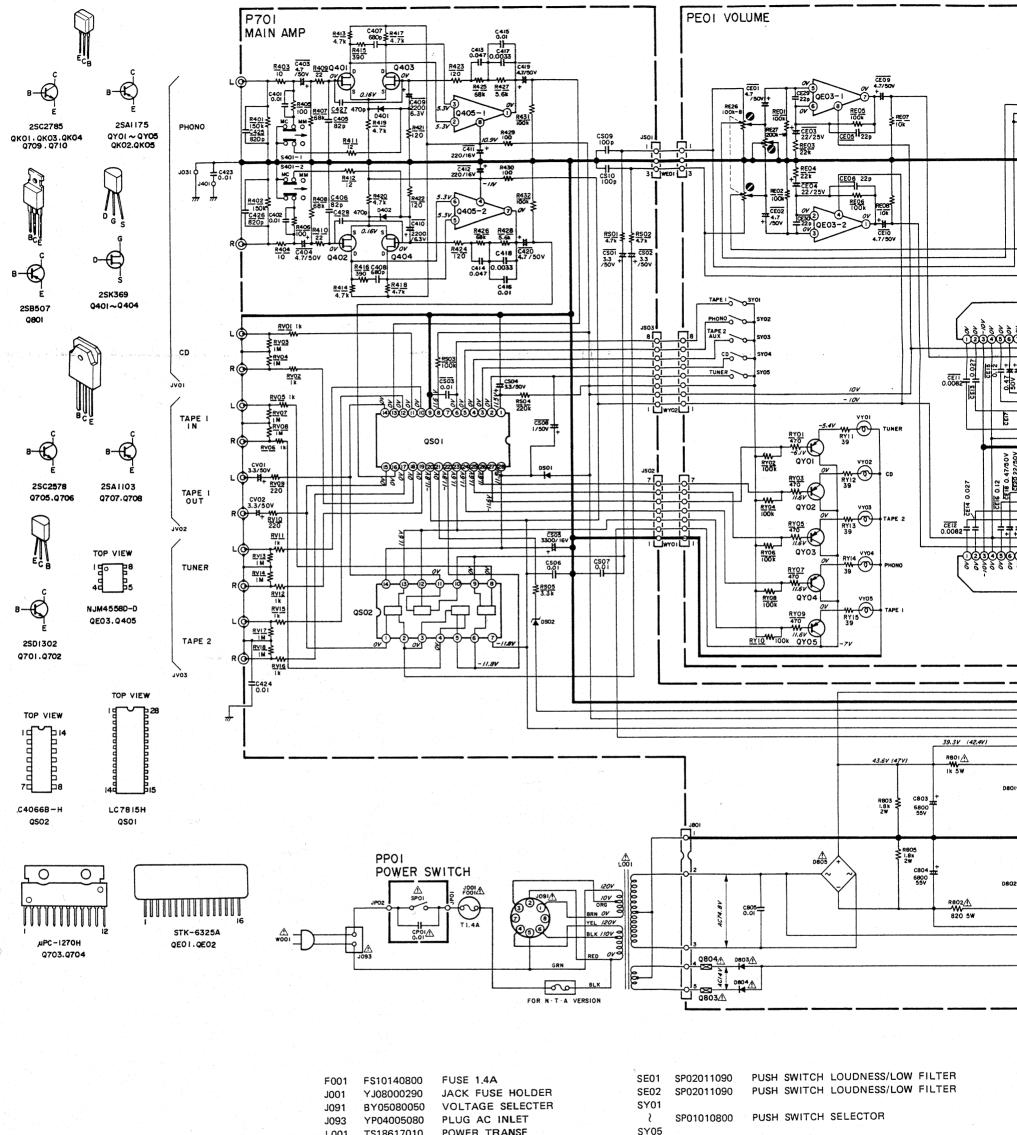
# Different Parts between MODEL PM351 and MODEL PM440.

Page	REF. DESIG.	PM440 (N, A)	PM351	DESCRIPTION
10	A	262H248400	293H248400	Front Panel Assembly
	001B	262H248010	293H248010	Front Panel
1	002B	261H105050		Chassis, Front
.	004B	261H265030	292H265010	Indicator, Function
	005B	261H265010	261H265110	Indicator, Balance
	006B	261H270010	261H270110	Button, Tuner
	007B	261H270020	261H270120	Button, Phono
İ	008B	261H270030	261H270130	Button, Video/Aux
	009B	261H270040	261H270140	Button, Tape Monitor
1	010B	261H270050	261H270150	Button, CD
	021B	20111270000	261H105510	Chassis (K) Front
	. 0216		20111103310	
	001S	262H801010	293H801010	Packing Case
	001T	262H851310	293H851310	User Manual
	002T	262H851320	293H851320	User Manual, Spec.
	003T	262H856010	293H856010	Circuit Diagram [N]
11	017B	262H270500	262H270510	Button MM/MC
·	001 F	262H105020	293H105020	Chassis, Main
	003F	416H057010	011T057010	Leg
	005F	51706009U0	52040408A0	H. Head Bolt. S, F
· · · · · · · · · · · · · · · · · · ·			VK262114640	P.W. Board, Main
12	P701	YK262H1610	YK262H1610	P.W. Board Assembly
		ZZ262H1610	ZZ293H8610	F.W. Bodid Assembly
	C411	EA22701630	EA10701630	Elect 100μF 16V
*	C412	EA22701630	EA10701630	Elect 100µF 16V
	C417	DF16333350	DF16332350	Film $0.0033 \mu F \pm 10\%$
	C418	DF16333350	DF16332350	Film 0.0033μF ±10%
	C421	DF16472350		Delete
	C422	DF16472350		Delete
	C425		DK16821300	Ceramic 820pF ±10%
	C426		DK16821300	Ceramic 820pF ±10%
	C427	·	DK16471300	Ceramic 470pF ±10%
	C428		DK16471300	Ceramic 470pF ±10%
	C809	EA10701630		Delete
	CK01	EA10605030		Delete
	1	EA33505030	EA33510030	Elect 3.3µF 100V
	CK04 CK05	EA47506330		Delete
	CNUS	EA4700000		
	R403	GD05331140	GD05100140	10Ω
	R404	GD05331140	GD05100140	10Ω

marantz.

# Different Parts between MODEL PM351 and MODEL PM440.

Page	REF. DESIG.	PM440 (N, A)	PM351	DESCRIPTION
13	R433	GD05561140		Delete
	R434	GD05561140	•	· ·
				Delete
	R801	GA05102030	GP05102050	1KΩ 5W
	R802	GA05821050	GP05821050	820Ω 5%
	R737		NF02100140	10Ω, Fusible
	R738	·	NF02100140	10Ω, Fusible
	R740			
	1740		GD05223140	22ΚΩ
	D707 }	HD20011010	HD20022030	Diode DSF-10C
	D710		11020022030	Diode DSF-10C
	D806	HD30026020	HD30045010	Zener HZ9C1-L
	DK01	HD20001000	11030043010	1
	DK02	i		Delete
	DK02	HD30023010		Delete
14	<b>∆</b> 0.703	HC10097060	HC10114060	IC μPC-1270H
	<b>∆</b> Q704	HC10097060	HC10114060	IC μPC-1270H
	. <b>∆</b> Q705	HT325802A0	HT331822A0	Transistor 2SC3182 (R, O)
	∆ Q706			
ĺ		HT325802A0	HT331822A0	Transistor 2SC3182 (R, O)
	<b>∆</b> Q707	HT111052A0	HT112652A0	Transistor 2SA1265 (R, O)
	<b>∆</b> Q708	HT111052A0	HT112652A0	Transistor 2SA1265 (R, O)
ľ	<b>∆</b> Q801	HT205072Q0	HT206472F0	Transistor 2SB647 (C, D)
	Q802		11120047210	11disistoi 230047 (C, D)
	2802		E1140045040	5
	0804		FU10215010	Rrolector Unit 1CPF-25
	Q804		r	
. ]	QK03	HT327852B0	UT21400240	T
	2103	FF3278528U	HT314002A0	Transistor 2SC1400 (D, E)
	11/01	•		
j	JV01			
· [	₹	YT02040470	YT02040500	Terminal, RCA Jack
	JV03			
	DEC.	V//		
	PE01	YK262H1620	YK262H1620	P.W. Board, Volume
j		ZZ262H1620	ZZ293H8620	P.W. Board, Assembly
	CE07	EA22601630		Delete
	CE08			
- 1		EA22601630	<del></del>	Delete
	CE11	DF16472350	DF15822350	Film 8200pF ±5%
l	CE12	DF16472350	DF15822350	Film 8200pF ±5%
!	CE13	DF16183350		
· 1			DF15273350	Film 0.027µF ±5%
	CE14	DF16183350	DF15273350	Film 0.027μF ±5%
5	CE15	DF16823350	DF15124350	Film 0.12μF ±5%
	CE16	DF16823350	DF15124350	Film 0.12μF ±5%
	CE17	EA33405030		•
			EJ47405010	Elect 0.47μF 50V
1	CE18	EA33405030	EJ47405010	Elect 0.47μF 50V
	CE19	EA10505030	EJ22505010	Elect 2.2µF 50V
	CE20	EA10505030	EJ22505010	Elect 2.2µF 50V
. 1	CE23	DF16183350		
- [		1	DF15183350	Film $0.018\mu F \pm 5\%$
1	CE24	DF16183350	DF15183350	Film 0.018μF ±5%
.	CE27	DF16683350	DF15104350	Film 0.1µF ±5%
ĺ	CE28	DF16683350	DF15104350	Film 0.1μF ±5%
	RE09	GG0E101140	•	
1	1	GG05101140		Delete
	RE10	GG05101140		Delete
j	RY11	1		
		·	GG05390140	39Ω
	RY15			
15	PX01	YK262H1660	YK262H1660	P.W. Board, Speaker Lamp
- 1		ZZ262H1660	ZZ293H8660	P.W. Board Assembly
				Dodiu Assembly
ĺ	RX01		GA05331010	330Ω 1W
- 1	RX02		GA05331010	330Ω 1W

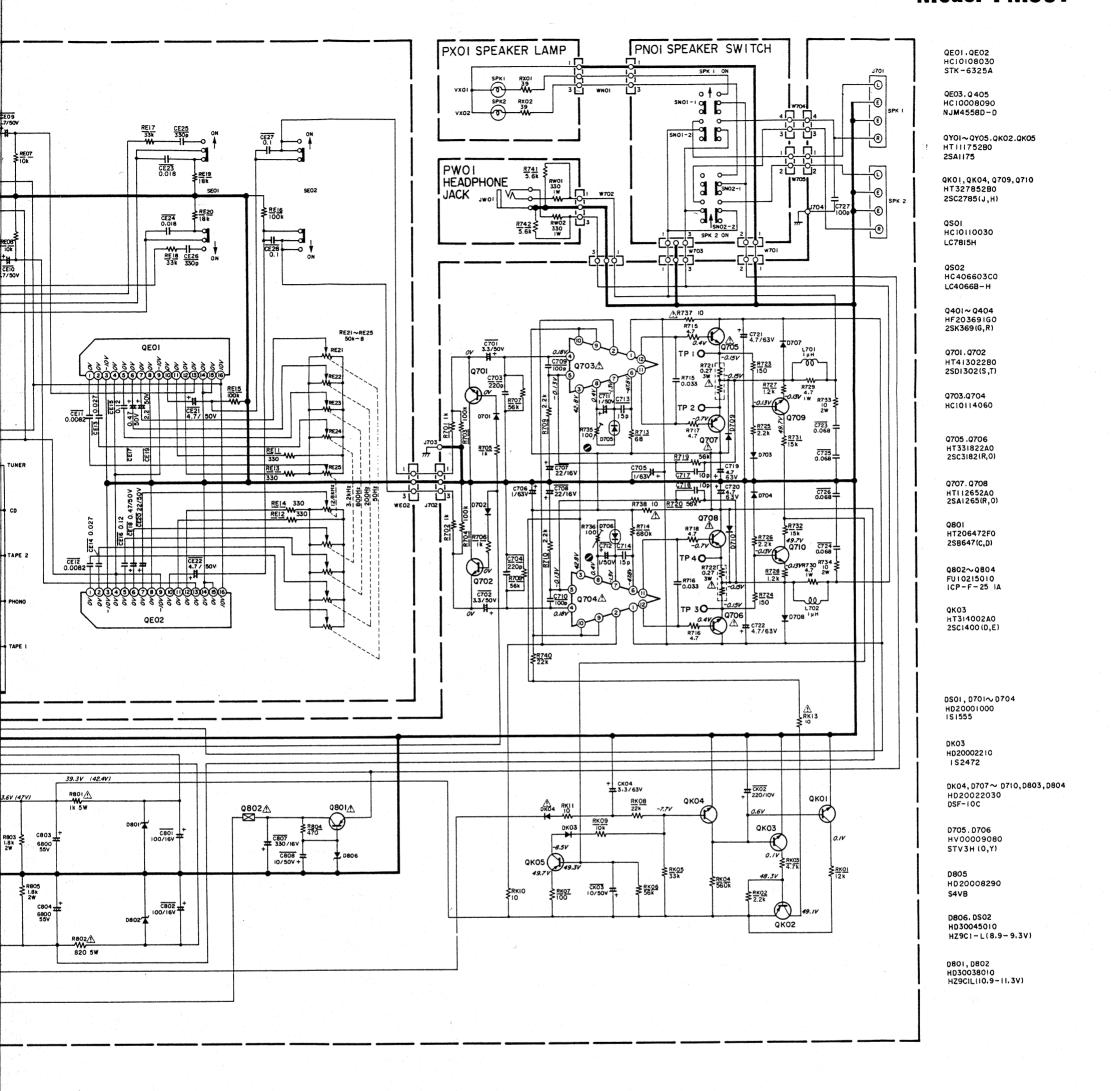


F001	FS10140800	FUSE 1.4A	SE01	SP02011090	PUSH SWITCH LOUDNESS/LOW FILTER
J001	YJ08000290	JACK FUSE HOLDER	SE02	SP02011090	PUSH SWITCH LOUDNESS/LOW FILTER
J091	BY05080050	VOLTAGE SELECTER	SY01		
J093	YP04005080	PLUG AC INLET	. ≀	SP01010800	PUSH SWITCH SELECTOR
L001	TS18617010	POWER TRANSF	SY05		
J701	YT03080020	TERMINAL SPEAKER	VY01		
JV01	YT02040500	TERMINAL RCA JACK	≀	IN10080620	LAMP
JV02	YT02040500	TERMINAL RCA JACK	VY05		
JV03	YT02040500	TERMINAL RCA JACK	SN01	SP04020440	PUSH SWITCH SPEAKER - 1
L701	LL23905120	COIL 1 mH	SP01	SP01010650	PUSH SWITCH POWER
L702	LL23905120	COIL 1 mH	CP01	DK18103840	CERAMIC 0.01µF
S401	SP04010470	PUSH SWITCH PHONO/MM, MC	JW01	YJ01001790	JACK HEADPHONE
RE21			VX01	IN10080620	LAMP 8V 50 mA
· · · · · · · · · · · · · · · · · · ·	RS05030520	VARIABLE 50 KΩ (B)	VX02	IN10080620	LAMP 8V 50 mA
RE25			W001	ZC01805010	AC POWER CORD [N]
RE26	RM01040840	VARIABLE 100 KΩ (B)	W001	ZC02006020	AC POWER CORD [A]
RE27	RX02040080	VARIABLE 200 KΩ (W)			

# NOTE ON SAFETY:

Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

# **Model PM351**



"SERVICE INFORMATION IS FOR USE BY QUALIFIED RERSONNEL ONLY -ANY MISADJUSTMENT OR MISALIGNMENT MAY BE TREATED AS A NON-WARRANTY REPAIR BY ANY MARANTZ SERVICE CENTRE - "

# **Kind of Common Parts**

RESISTOR

R\*\*\* (1) GD05 --- 140, Carbon film fixed resistor, ±5% 1/4W

 $R^{***}$  (2) GD05 - - - 160, Carbon film fixed resistor,  $\pm 5\%$  1/6W

C\*\*\* : CERAMIC CAP.

(1) DD1 ---- 370, Ceramic condenser,

disc type (titan condenser) Temp. coeff. P350 ~ N1000 50V

C\*\*\* : CERAMIC CAP.

(1) DK16 - - - 300, High dielectric constant ceramic condenser,

disc type (titan variable) Temp. chara. 2B4 50V

C\*\*\*: ELECTROLY CAP. (本)/FILM CAP. (二)

(1) EA ----- 10, Electrolytic condenser,

one-way lead type, tolerance ±20% (2) DF15 --- 350. Plastic film condenser, one-way type, Mylar, ±5% 50V

\*In case of ordering the common parts, please establish the correct parts number of 10 figures by the procedure "ASSIGNMENT OF COMMON PARTS CODES"

SS/LOW FILTER SS/LOW FILTER

# TECHNICAL SPECIFICATIONS

AUDIO SECTION
POWER OUTPUT PER CHANNEL       70 W         DIN 4 OHMS       65 W         RMS 4 OHMS       65 W         DIN 8 OHMS       60 W         RMS 8 OHMS       50 W         TOTAL HARMONIC DISTORTION AT RMS 8 OHMS       0.05%         I.M. DISTORTION       0.05%         DAMPING FACTOR 8 OHMS (1 kHz)       55
MM CARTRIDGE INPUT
Frequency Response (RIAA) 20 Hz – 20 kHz)       ±0.5 dB         Signal-to-Noise Ratio       80 dB         Input Impedance       47 k ohms         Input Capacitance       100 pF         Input Sensitivity       2.5 mV
MC CARTRIDGE INPUT
Input Sensitivity
AUX. INPUT
Input Impedance       25 k ohms         Input Sensitivity       150 mV         Frequency Response (±2 dB)       10 Hz - 50 kHz         Signal-to-Noise Ratio       93 dB
OUTPUT VOLTAGE
Tape Out (Input 7.75 mV)
OUTPUT IMPEDANCE
Tape Out
GENERAL
Power Requirements
Unit Alone

Specifications and appearance are subject to change for modification without notice.

# SERVICE DIVIDAL DIVIDAL



model PM440



#### MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, MARANTZ company has created the ultimate in stereo sound. Only original MARANTZ parts can insure that your MARANTZ product will continue to perform to the specifications for which it is famous.

Parts for your MARANTZ equipment are generally available to our National Marantz Subsidiary or Agent.

#### ORDERING PARTS:

Parts can be ordered either by mail or by telex. In both cases, MARANTZ part number has to be specified. If you order by mail, fulfil MARANTZ order forms.

> MARANTZ S.A. EUROPEAN PARTS DEPARTMENT 2, Avenue Léopold III B-7120 PERONNES-lez-BINCHE BELGIUM TWX: 57589 SEPLT B

SUPERSCOPE NATIONAL PARTS DEPARTMENT 20525 Nordhoff Street Chatsworth, California 91311

Phone: 1-800-423-5108 Phone: 1-213-998-9333

The following information must be supplied to eliminate delays in processing your order:

- 1. Complete address
- 2. Complete part numbers and quantities required
- 3. Description of parts
- 4. Model number for which part is required
- 5. Way of shipment
- 6. Signature: any order form or telex must be signed otherwise such part order will be considered as null and void.

#### PARTS ORDERING:

Parts may be ordered from the following addresses:

#### **EUROPE**

MARANTZ S.A. European Parts Department 2. Avenue Léopold III B-7120 Péronnes-lez-Binche Belgium

Telex: 57589 MARANTZ S.A.

Belgium

326 Avenue Louise Bte 32 1050 Bruxelles

Telex: 26602

MARANTZ DENMARK MARANTZ BELGIUM

Bregnerødvei 132b 3460 Birkerød Denmark Telex: 39137

MARANTZ FRANCE

4 Rue Bernard Palissy 92600 Asnières

France Telex: 611651 45 Rue Auguste Van Zande 1080 Brussels Belgium

Svartviksvägen 56 Träneberg Bromma

Sweden Telex: 13449 MARANTZ NEDERLAND B.V. MARANTZ AUSTRIA Ge.M.B.H.

Wagenmackersweg 3 3449 H.V. Woerden Netherlands

MARANTZ SVENSKA A.B. MARANTZ ITALIANA S.p.A. Via Monte Napoleone, 10

20121 Milano

Austria Telex: 113583

MARANTZ GERMANY G.M.B.H. Max-Planckstrasse 22

25 Franz Lisztgasse

2380 Perchtoldsdorf.

6072 Dreieich 1 Germany Telex: 4185316

#### MARANTZ AUDIO U.K. LTD.

Unit 15/16 Saxon Way Industrial Estate Moor Lane Harmondsworth UB7 OLW Great Britair Telex: 935196

#### **AUSTRALIA**

MARANTZ AUSTRALIA PTY., LTD. 19 Chard Road Brookvale, NSW 2100 Australia

Telex: 24121

U.S.A.

MARANTZ COMPANY, INC. National Service Dept. P.O. Box 577 Chatsworth, CA 91311 U.S.A.

Telex: 4720284

JAPAN

MARANTZ JAPAN, INC. 35-1, 7-chome, Sagamiono Sagamihara-shi, Kanagawa Japan

Telex: 22878

All of the above locations are fully equipped to take care of your total service needs. Because various countries have differing configuration requirements, it is necessary that you contact the service facility in your particular country. In the event that there is no service location listed for your country, please, contact the nearest facility for the necessary assistance.

> In case of difficulties, do not hesitate to contact the Technical Department at abovementioned address.

#### NOTE-FOR U.S.A. ONLY

Parts for your MARANTZ stereo are generally available within 72 hours throughout the nation via a toll-free line to our National Parts Depot in California. The sales professionals who take your call immediately refer to their own desk top computer terminal and can quickly determine the availability and price information you require. If, for some reason, your order should exceed our available stock, we usually can instantly provide an alternate replacement part or current delivery information. When the order is placed and confirmed, the computer simultaneously generates "hard copy" orders at the distribution center. As hard copies come directly from the computer to the national parts depot, your requested stock is assembled and prepared for shipment and placed on the first available carrier for delivery to you.

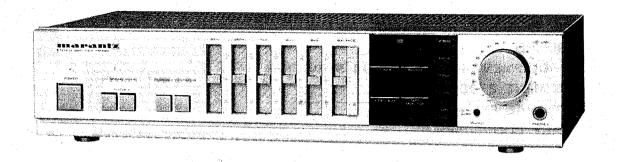
Phone orders will eliminate mail delays, and we encourage the use of this method. If you order by mail, use MARANTZ parts order forms which are available from SUPERSCOPE NATIONAL PARTS DEPARTMENT.



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#### MODEL PM440 STEREO PRE MAIN AMPLIFIER



#### INTRODUCTION

This service manual was prepared for use by Authorized Warranty Stations and contains service information for the Marantz Model PM440 Stereo Pre Main Amplifier.

Servicing information and voltage data included in this manual are intended for use by knowledgeable and experienced personnel only. All instructions should be read carefully. No attempt should be made to proceed without a good understanding of circuitry operation.

The parts list furnishes complete ordering information. Most replacement parts should be ordered from the Marantz Company. However, a simple description is included for parts which can be obtained locally.

#### 1. SHOCK, FIRE HAZARD SERVICE TEST:

CAUTION: After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before return to user/customer.

REF UL Standard No. 1270. Para. 66. 3. D (Mandatory Test after servicing Electrical Appliances, effective 7-1-83).

#### 2. P.W. BOARDS

As can be seen from the circuit diagram the chassis of Model PM440 consists of the following units. Each unit mounted on a printed circuit board is discribed within the square enclosed by a bold dotted line on the circuit diagram.

1. Main Amp	mounted on P.W. Board P701
	mounted on P.W. Board PE01
	mounted on P.W. Board PN01
	mounted on P.W. Board PP01
5. Headphone Jack	mounted on P.W. Board PW01
	mounted on P.W. Board PX01

# 3. TEST EQUIPMENT REQUIRED FOR SERVICING

This table lists the test equipment required for servicing the Model PM440 Stereo Pre Main Amplifier.

ltem	Use
Distortion Analyzer	Distortion measurements
Audio Oscillator	Sinewave and squarewave signal source
AC VTVM	Voltage measurements (AC)
Oscilloscope	Waveform analysis and trouble shooting and ASO alignment
Circuit Tester	Trouble shooting
DC VTVM	Voltage measurements (DC)
AC Wattmeter	Monitors primary power to amplifier
Line Voltmeter	Monitors potential of primary power to amplifier
Variable Autotransformer (0 ~ 140V AC, 10A)	Adjust level of primery power to amplifier
Shorting Plug	Shorts amplifier input to eliminate noise pickup

#### 4. ADJUSTMENT PROCEDURES

#### **IDLING ADJUSTMENT**

- 1. Set the input and the output of the unit to OPEN.
- 2. Connect a digital voltmeter between TP-1 and TP-2 of channel L, and between TP-3 and TP-4 of channel R.
- 3. Turn on the power switch, wait for 10 seconds, and then adjust R735 of channel L and R736 of channel R so that the digital voltmeter registers 12 mV (22 mA).

#### 5. FUNCTIONAL EXPLANATION

#### 1. FUNCTION SWITCH

This unit can store more than one week's schedule in its memory, thanks to the four source-one monitor high voltage resistant analogue function switch IC and the capacitor backup for the memory. When the charge of the memory backup reaches zero, the tuner will be initialized. Additionally, the mute signal for the popping sound caused when the function is switched is output from DS02 so that the input of the main amplifier will be muted.

#### **2 TONE AMPLIFIER**

The tone amplifier features a simple design that uses a single operational amplifier. The level of 100 Hz and 10 kHz can be controlled over a range of +/-10 dB, and the gain is approximately 20 dB. The output stage is connected to the subsonic filter formed by CE21 and CE22 (0.068  $\mu$ F). 0.

#### 3. POWER AMPLIFIER

The power amplifier uses the monolithic IC UPC1270H which includes a driver stage as the voltage amplifier, and discrete power transistors for the final stage.

#### 4. PHONO EQUALIZER AMPLIFIER

The high gain phono amplifier uses an FET differential amplifier together with an operational amplifier input stage. Low output designs such as MC cartridges can be used as well as MM, MI, or other high output cartridge designs.

#### 5. GRAPHIC EQUALIZER

The first stage is a buffer amplifier which amplifies the input by approximately 6 dB. QE01 and QE02 (STK 6325A) of the second stage are the graphic equalizer ICs. They form a five band graphic equalizer (63 Hz, 25 Hz, 1 kHz, 4 kHz, 16 kHz).

# 6. VOLTAGE CONVERSION

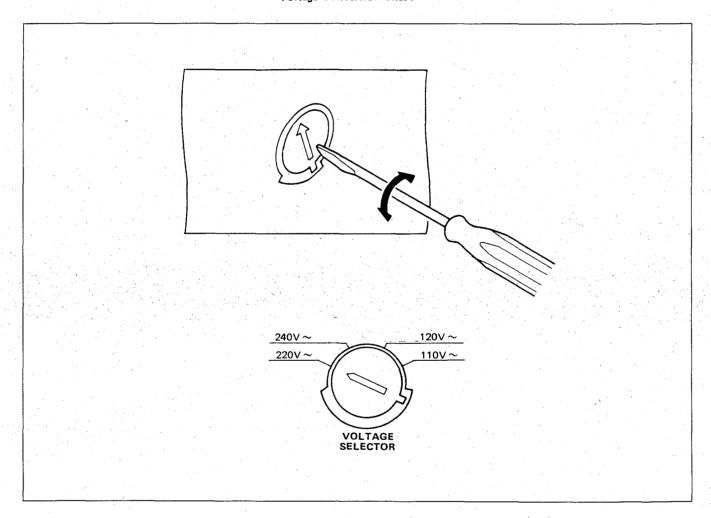
#### • EUROPEAN MODEL ONLY

To convert the unit to a different power source voltage, change the position as illustrated in the drawing below.

#### CAUTION

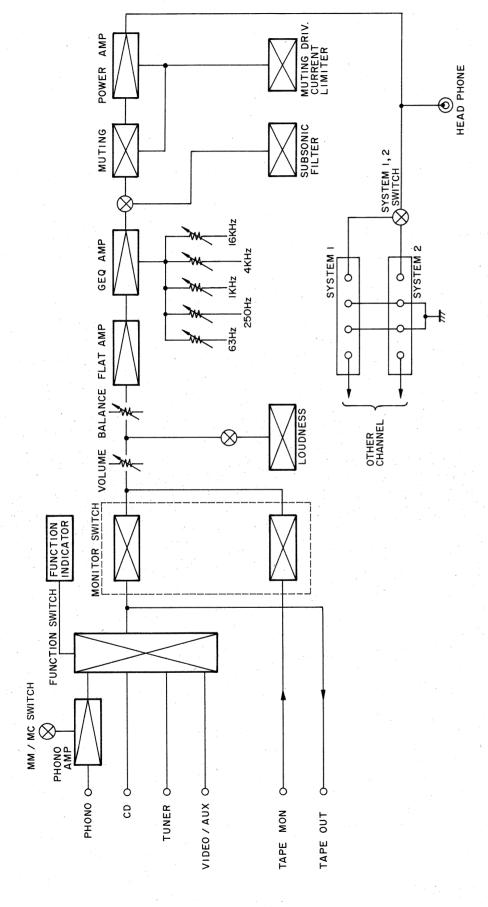
DISCONNECT POWER SUPPLY CORD FROM AC OUTLET BEFORE CONVERTING VOLTAGE.

#### **Voltage Conversion Chart**



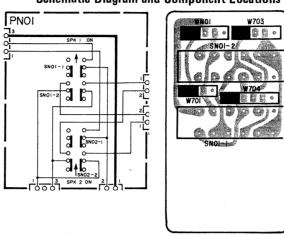
Note on safety: Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

# 7. BLOCK DIAGRAM

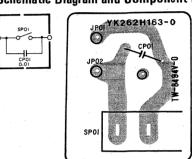


# 8. DIAGRAM AND COMPONENT LOCATIONS

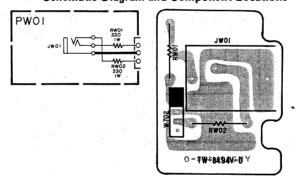
8.1 Speaker Switch Assembly (PNO1)
Schematic Diagram and Component Locations



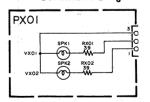
8.2 Power Switch Assembly (PP01)
Schematic Diagram and Component Locations

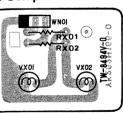


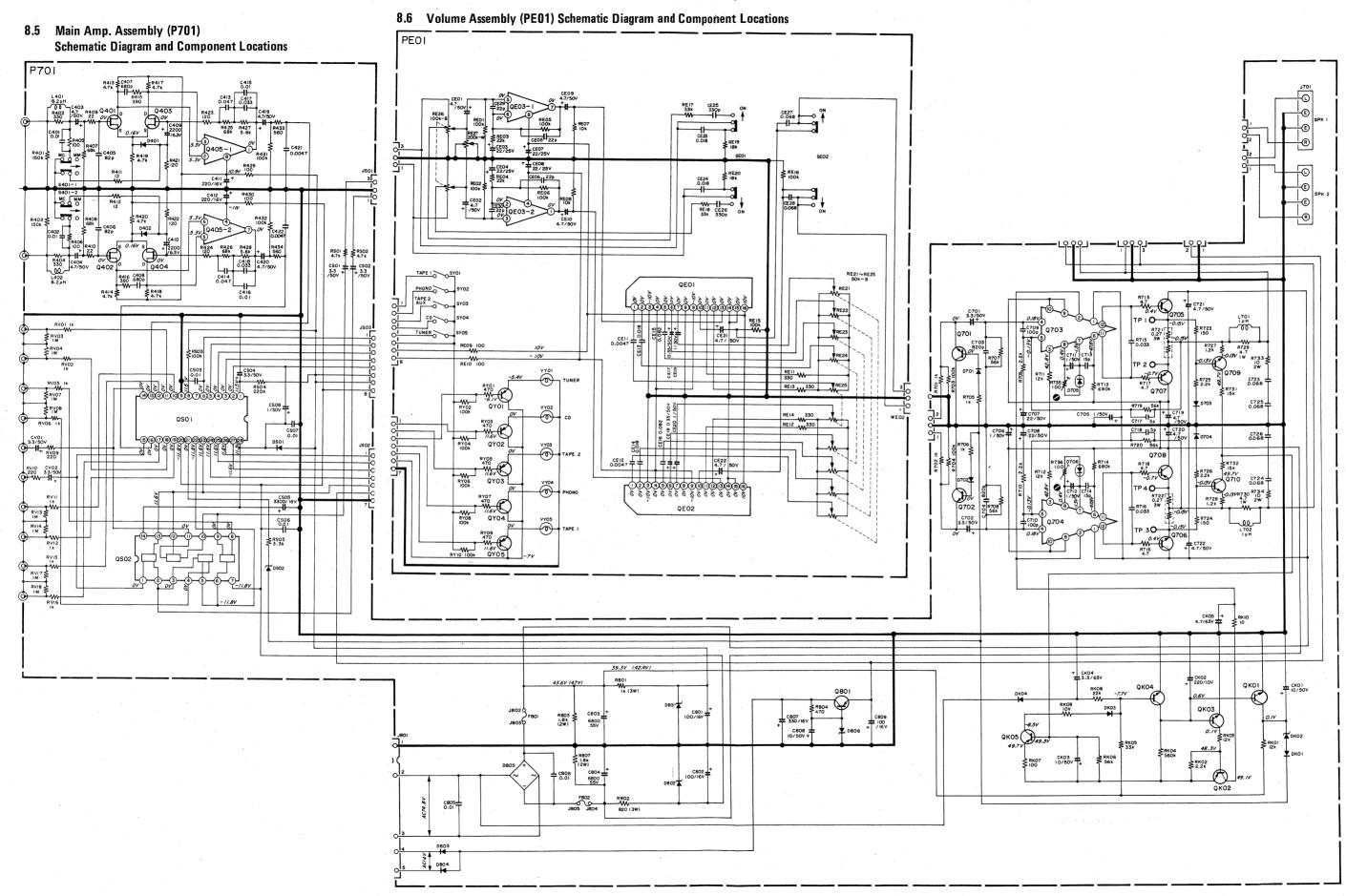
8.3 Headphone Jack Assembly (PW01)
Schematic Diagram and Component Locations

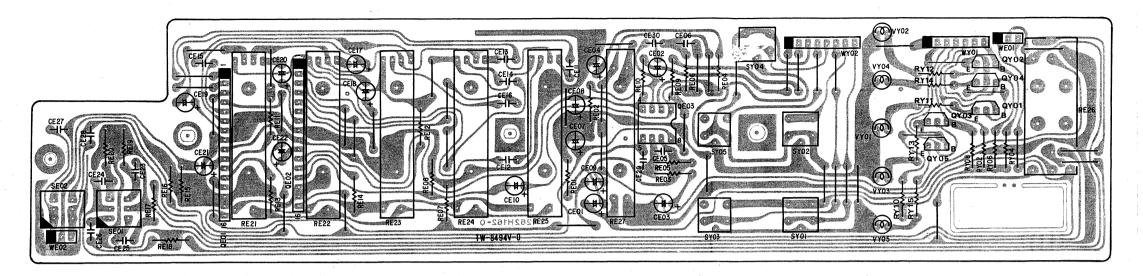


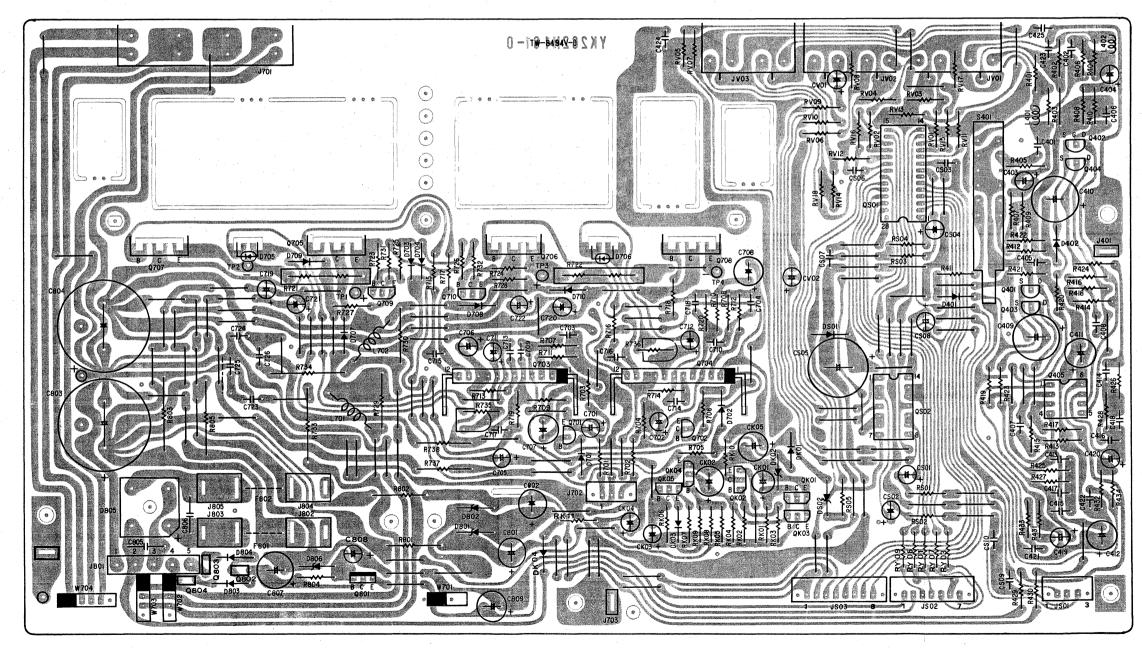
8.4 Speaker Lamp Assembly (PX01)
Schematic Diagram and Component Locations





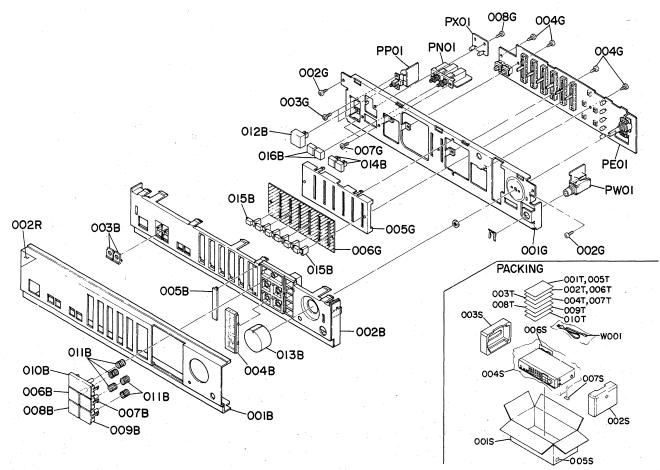






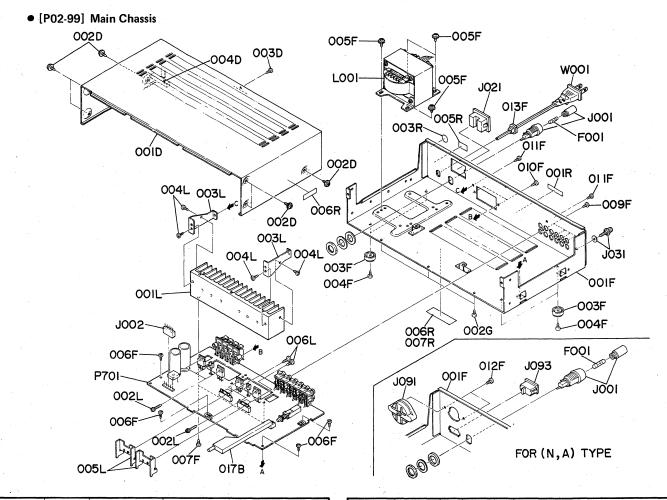
# 9. EXPLODED VIEW AND PARTS LIST

• [P01-99] Front Panel/Chassis and Packing Materials



REF.	F. Q'TY PART NO.		BART NO	DESCRIPTION	
DESIG.	U	N	Α	FART NO.	DESCRIPTION
А	1	1	1	262H248400	Front Panel Assembly
001B	1	1	1	262H248010	Front Panel
002B	1	1	1	261H105050	Chassis, Front
003B	2	2	2	158T355010	Lens, Speaker
004B	1	1	1	261H265030	Indicator, Function
005B	1	1	1	261H265010	Indicator, Balance
006B	1	1	1	261H270010	Button, Tuner
007B	1	1	1	261H270020	Button, Phono
008B	1	1	1	261H270030	Button, Video/AUX
009B	1	1	1	261H270040	Button, Tape Monitor
010B	1	1	1	261H270050	Button, CD
011B	5	5	5	261H115010	Spring, Button
	1				
012B	1	1	1	158T270010	Button, Power
013B	1	1			Knob, Volume
014B	2	2	2	262H270020	Button, Subsonic/Loudness
015B	6	6	6	261H154020	Knob, Balance EQ
016B	2	2	2	242H270020	Button, Speaker
001G	1	1	1	261H105010	Chassis, Front
002G	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
003G	2	2	2	51100306A9	B.H.M. Screw B3 x 6
004G	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8
005G	1	1	1	261H053010	Cover, Tone
006G	1	1	1	261H265020	Indicator
007G	2	2	2	51100306A9	B.H.M. Screw B3 x 6
008G	1	1	1	51280308B0	B.H. Tapped Screw B3 x 8
0005				40511004040	
002R	1	1		105H861010	Label

REF.	C	ľΤ	Y	PART NO.	DESCRIPTION
DESIG.	υ	N	Α	FARTINO.	DESCRIPTION
001S 001S 002S 003S 004S 005S	1 1 1 1 2	1 1 1 1 4	1 1 1 1	262H801020 262H801010 261H809010 261H809020 9090808030 9526019010 9526019060	Packing Case Packing Case Cushion, (R) Cushion, (L) Polyethylene Sheet Serial No. Card Serial No. Card
005S 005S 006S	1	4	4	9526019060 9526019030 2918107390	Serial No. Card Serial No. Card Sheet, AC Cord
001T 002T 003T 004T 005T 006T 007T 008T 009T 010T	1 1 1 1 1 1 1	1 1 1 1	1	262H851310 262H851320 262H856010 9631000090 262H851210 262H851220 103H854010 2225813010 9650000050 101K854210 ZC01805010	User Manual User Manual Circuit Diagram Warranty Card User Manual User Manual, Spec Warranty Card Envelope S. Station Card Warranty Card, Canada A.C. Power Cord
<b>∆W001</b>		-	1	ZC02006020	A.C. Power Cord



REF.	C	ľΥľ	Y	PART NO.	DESCRIPTION
DESIG.	U	N	Α	TAITINO.	DESCRIPTION
	1				
017B	1	1	1	262H270500	Button, MM/MC
001D	1	1	1	261H257010	Lid, Top Cover
002D	6	6	6	51706009U0	SPEC. Set Screw
003D	1	1	1	51280308B0	B.H. Tapped Screw B3 x 8
004D	1			261H056010	Buffer
004D		1	1	208H056010	Buffer
001F	1			262H105030	Chassis, Main
001F		1	1	262H105020	Chassis, Main
003F	4	4		416H057010	Lea
004F	4	4	4		B.H. Tapped Screw B4 x 8
005F	4	4	4		SPEC. Set Screw
006F	4			51280308B0	B.H. Tapped Screw B3 x 8
006F	1	3	3	51280308B0	B.H. Tapped Screw B3 x 8
007F	3	3	3	51280308B0	B.H. Tapped Screw B3 x 8
009F	3	3	3	51280308B0	B.H. Tapped Screw B3 x 8
010F	2	2	2	51280308B0	B.H. Tapped Screw B3 x 8
011F	2	2		51280308B0	B.H. Tapped Screw B3 x 8
012F		2	2	51280308B0	B.H. Tapped Screw B3 x 8
013F	1			1455259090	Bushing, AC Cord
002G	3	3	3	51280308B0	B.H. Tapped Screw B3 x 8
001L	1	1	1	261H267020	Heatsink
002L	6	6	6	51780312B0	Fin Neck B.T. Screw B3 x 12
003L	2	2	2		Bracket, Heatsink
004L	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8
005L	2	2	2	262H267010	Heatsink, IC
006L	4	4	4	51280308B0	B.H. Tapped Screw B3 x 8

REF.	_ (	J'T	Y	PART NO.	DESCRIPTION		
DESIG.	U	N	Α	TAITING.	DESCRIPTION		
001R	1			2112265010	Indicator, Serial No.		
001R	١.	1	1	2112265110	Indicator, Serial No.		
003R	1	١.	'	9511101070	Label, UL		
005R	1			2457861040	Label, CSA		
006R	2			117H861010	Label		
007R	-	1	1	2911861110	Label		
00711		١.		2511001110	Lubei		
<b></b> ∆F001	1			FS10300500	Fuse 3A		
<b>∆F001</b>	١.	1	1	FS10140800	Fuse 1.4A		
<b></b> ∆J001	1			YJ08000300	Jack, Fuse Holder		
<b></b> ∆J001		1	1	YJ08000290	Jack, Fuse Holder		
J002	1	1	1	YJ06001050	Jack, 5P		
<b></b> ∆J021	1			YJ04001010	Jack, AC Outlet		
J031	1	1	1	YL03010250	Terminal, GND		
<b></b> ∆J091		1	1	BY05080050	Voltage Selector		
<b></b> ∆1093	1	1	1	YP04005080	Plug, AC Inlet		
A 1 004							
∆L001	1	١.		TS17629030	Power Transformer		
<b>∆L001</b>		1	1	TS18617010	Power Transformer		
∆W001	1			YC01800260	A.C. Power Cord		
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#### 10. ELECTRICAL PARTS LIST

REF.	-	2′Τ		PART NO.	DESCRIPTION
DESIG.	U	N	Α		
P701	1	1	1	YK262H1610 ZZ262H1610	P701-MAIN AMP CIRCUIT BOARD P.W. Board, Main Amp P.W. Board Assembly
C401 C402 C403 C404 C405 C406 C407 C408 C409 C410	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	DF16103350 DF16103350 EA47505030 EA47505030 DD15820370 DD15820370 DD15681370 DD15681370 EA22800630 EA22800630	$\begin{array}{llllllllllllllllllllllllllllllllllll$
C411 C412 C413 C414 C415 C416 C417 C418 C419 C420	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	EA22701630 EA22701630 DF16473350 DF16473350 DF16103350 DF16103350 DF16333350 DF16333350 EA47505030	Elect 220μF 16V Elect 220μF 16V Film 0.047μF $\pm$ 10% Film 0.047μF $\pm$ 10% Film 0.01μF $\pm$ 10% Film 0.03μF $\pm$ 10% Film 0.033μF $\pm$ 10% Film 0.033μF $\pm$ 50V Elect 4.7μF 50V
C421 C422 C423 C424	1 1 1	1 1 1	1 1 1 1	DF16472350 DF16472350 DK18103310 DK18103310	Film 4700pF ±10% Film 4700pF ±10% Ceramic 0.01 µF Ceramic 0.01 µF
C701 C702 C703 C704 C705 C706 C707 C708 C709 C710	1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1	EA33505030 EA33505030 DD15821370 DD15821370 EA10505030 EA10505030 EA22605030 EA22605030 DD15101370 DD15101370	Elect $3.3 \mu F$ $50 \text{ V}$ Elect $3.3 \mu F$ $50 \text{ V}$ Ceramic $820 \text{ pF}$ $\pm 5 \%$ Ceramic $820 \text{ pF}$ $\pm 5 \%$ Elect $1 \mu F$ $50 \text{ V}$ Elect $1 \mu F$ $50 \text{ V}$ Elect $22 \mu F$ $50 \text{ V}$ Elect $22 \mu F$ $50 \text{ V}$ Ceramic $100 \text{ pF}$ $\pm 5 \%$ Ceramic $100 \text{ pF}$ $\pm 5 \%$
C711 C712 C713 C714 C715 C716 C717 C718 C719 C720	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1	EA10505030 EA10505030 DD15150370 DD15150370 DF16333350 DF16333350 DD10050370 DD10050370 EA47505030 EA47505030	Elect $1μF$ $50V$ Elect $1μF$ $50V$ Ceramic $15pF$ $±5\%$ Ceramic $15pF$ $±5\%$ Film $0.033μF$ $±10\%$ Ceramic $5pF$ $±0.25pF$ Ceramic $5pF$ $±0.25pF$ Elect $4.7μF$ $50V$ Elect $4.7μF$ $50V$
C721 C722 C723 C724 C725 C726	1 1 1 1 1	1 1 1 1	1 1 1 1	EA47505030 EA47505030 DF16683350 DF16683350 DF16683350 DF16683350	Elect $4.7 \mu F$ 50V Elect $4.7 \mu F$ 50V Film $0.068 \mu F$ $\pm 10\%$ Film $0.068 \mu F$ $\pm 10\%$ Film $0.068 \mu F$ $\pm 10\%$ Film $0.068 \mu F$ $\pm 10\%$

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REF. DESIG.	U	N N	Y	PART NO.	DESCRIPTION
	F	Ι.			
C801	1	1	1	EA10701630	Elect 100μF 16V
C802	ľ	1	1	EA10701630	Elect 100µF 16V
C803	1	1	1	EB68805060	Elect 6800µF 50V
C804	i	1	1	EB68805060	Elect 6800µF 50V
C805	1	1	i	DK18103560	Ceramic 0.01µF
C806	1	1		DK18103560	Ceramic 0.01µF
C807	1	1		EA33701630	Elect 330 µF 16V
C808	1	1	;	EA10605030	Elect 10µF 50V
C809	1	1	1	EA10701630	Elect 100µF 16V
CK01	1.	1	1	EA10605030	Elect 10µF 50V
CK02	1	1	1	EA22701030	Elect 220µF 10V
CK03	1	1	1	EA10605030	Elect 10µF 50V
CK04	1	1	1.	EA33505030	Elect 3.3μF 50V
CK05	1	1	1	EA47506330	Elect 4.7μF 63V
CS01	1	1	1	EA33505030	Elect 3.3μF 50V
CS02	1	1	1	EA33505030	Elect 3.3µF 50V
CS03	1	1	1	DK18103310	Ceramic 0.01µF
CS04	1	1	1	EA33505030	Elect 3.3 µF 50 V
CS05	1	1	1	EA33801630	Elect 3300µF 16V
CS06	1	1	1	DK18103310	Ceramic 0.01µF
CS07	1	1	1	DK18103310	Ceramic 0.01 µF
CS08	1	1	1	EA10505030	Elect 1μF 50V
01/01	,	1	,	E 422E0E020	Flect 3.3µF 50V
CV01	1	1	1	EA33505030 EA33505030	Elect $3.3\mu$ F $50V$ Elect $3.3\mu$ F $50V$
CV02	1	'	'	EA33505030	Elect 3.3µF 50V
	-				P701-RESISTORS
					(All Resistors are ±5% and ¼W)
R401	1	1	1	GD05154140	150ΚΩ
R402	1	1	j ]	GD05154140	150ΚΩ
R403	1	1	1	GD05331140	$330\Omega$
R404	1	1	1	GD05331140	$330\Omega$
R405	1	1	1	GD05331140	100Ω
R406	1	1	1	GD05101140	100Ω
R407	1	1	1	GD05683140	68KΩ
R408	1	1	1	GD05683140	68ΚΩ
R409	1	1	1	GD05220140	$22\Omega$
R410	1	1	1	GD05220140	22Ω
			.		
R411	1	1	1	GD05120140	12Ω
R412	1	1	1	GD05120140	12Ω
R413	1	1	1	GD05472140	4.7ΚΩ
R414	1	1	1	GD05472140	4.7ΚΩ
R415	1	1.	1	GD05391140	390Ω
R416	1	1	1	GD05391140	390Ω
R417	1	1	1	GD05472140	4.7ΚΩ
R418	1	1	1	GD05472140	4.7KΩ
R419	1	1	1	GD05472140	4.7KΩ 4.7KΩ
R420	1	'	'	GD05472140	4./1\26
R421	1	1	1	GD05121140	120Ω
R421	1	1	1	GD05121140	120Ω
R423	1	1	1	GD05121140	120Ω
R424	1	1	1	GD05121140	120Ω
R425	1	1	1	GD05683140	68KΩ
R426	1	1	1	GD05683140	68KΩ
R427	1	1	1	GD05562140	5.6KΩ
R428	1	1	1	GD05562140	5.6KΩ
R429	1	1	1	GG05101140	100Ω
R430	1	1	1	GG05101140	100Ω
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REF. DESIG.	U	T'C	Y	PART NO.	DESCRIPTION		REF. DESIG.		Ω'T'	Y	PART NO.	DESCRIPTION
R431 R432 R433 R434	1 1 1 1	1 1 1 1	1 1 1	GD05104140 GD05104140 GD05561140 GD05561140	100ΚΩ 100ΚΩ 560Ω 560Ω		RS01 RS02 RS03 RS04 RS05	1 1 1 1 1	1 1 1 1 1	1 1 1 1	GD05472140 GD05472140 GD05104140 GD05224140 GD05332140	4.7ΚΩ 4.7ΚΩ 100ΚΩ 220ΚΩ 3.3ΚΩ
R701 R702 R703 R704 R705 R706 R707 R708 R709	11111111	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	GD05102140 GD05102140 GD05104140 GD05104140 GD05102140 GD05102140 GD05563140 GD05563140 GD05222140 GD05222140	1KΩ 1KΩ 100KΩ 100KΩ 1KΩ 1KΩ 56KΩ 56KΩ 2.2KΩ 2.2KΩ	18.2	RV01 RV02 RV03 RV04 RV05 RV06 RV07 RV08 RV09 RV10	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	GD05332140 GD05102140 GD05105140 GD05105140 GD05105140 GD05105140 GD05105140 GD05105140 GD05221140 GD05221140	1ΚΩ 1ΚΩ 1ΜΩ 1ΜΩ 1ΚΩ 1ΚΩ 1ΜΩ 1ΜΩ 220Ω 220Ω
R711 R712 R713 R714 R715 R716 R717 R718 R719	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	GD05123140 GD05123140 GD05684140 GD05684140 GG05047140 GG05047140 GG05047140 GD05563140	12KΩ 12KΩ 680KΩ 680KΩ 4.7Ω 4.7Ω 4.7Ω 4.7Ω 56KΩ		RV11 RV12 RV13 RV14 RV15 RV16 RV17	1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1 1	GD05102140 GD05102140 GD05105140 GD05105140 GD05102140 GD05102140 GD05105140 GD05105140	1ΚΩ 1ΚΩ 1ΜΩ 1ΜΩ 1ΚΩ 1ΚΩ 1ΜΩ
A R720 A R721 A R722 R723 R724	1 1 1 1 1	1 1 1 1	1 1 1 1 1	BW10000040 BW10000040 GD05151140 GD05151140	$56$ Κ $\Omega$ 0.27 $\Omega$ 3W x 2, Compo. 0.27 $\Omega$ 3W x 2, Compo. 150 $\Omega$		D401 D402 D701 D702	1 1 1 1	1 1 1	1 1 1	HD20001000 HD20001000 HD20001000 HD20001000	P701-SEMICONDUCTORS Diode 1S1555 Diode 1S1555 Diode 1S1555 Diode 1S1555
R725 R726 R727 R728 R729 R730	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	GD05222140 GD05222140 GD05122140 GD05122140 GA05047010 GA05047010	2.2KΩ 2.2KΩ 1.2KΩ 1.2KΩ 4.7Ω 1W 4.7Ω 1W		D703 D704 D705 D706 D707 D708	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	HD20001000 HD20001000 HV00009080 HV00009080 HD20011010 HD20011010	Diode         1S1555           Diode         1S1555           Varistor         STV3H(O,Y)           Varistor         STV3H(O,Y)           Diode         W06C           Diode         W06C
R731 R732 R733 R734 R735 R736	1 1 1 1 1	1 1 1 1 1	1 1 1 1	GD05153140 GD05153140 GA05100020 GA05100020 RA01010600 RA01010600	$15K\Omega$ $15K\Omega$ $10\Omega$ $2W$ $10\Omega$ $2W$ $10\Omega\Omega$ , Trimming $100\Omega$ , Trimming		D709 D710 D801 D802 △ D803 △ D804	1 1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	HD20011010 HD20011010 HD30038010 HD30038010 HD20022030 HD20022030	Diode W06C  Zener HZ9C1L  Zener HZ9C1L  Diode DSF10C  Diode DSF10C
⚠ R801 ⚠ R802 R803 R804 R807	1 1 1 1	1 1 1 1	1 1 1 1	GA05102030 GA05821030 GA05182020 GD05471140 GA05182020	1ΚΩ 3W 8.2ΚΩ 3W 1.8ΚΩ 2W 470Ω 1.8ΚΩ 2W		DR05 DR06 DK01 DK02 DK03	1 1 1 1 1	1 1 1 1 1 1	1 1 1 1 1	HD20008290 HD30026020 HD20001000 HD30023010 HD20002210 HD20002230	Diode         S4VB20           Zener         MA1075H           Diode         1S1555           Zener         HZ6C1L           Diode         1S2472           Diode         DSF10C
RK01 RK02 RK03 RK04 RK05	1 1 1 1	1 1 1 1	1 1 1 1	GD05123140 GD05222140 GD05123140 GD05564140 GD05333140	12ΚΩ 2.2ΚΩ 12ΚΩ 560ΚΩ 33ΚΩ		∆ DK04 DS01 DS02	1	1 1	1	HD20001000 HD30045010	Diode 1S1555 Zener HZ9C1L
RK06 RK07 RK08 RK09 RK10	1 1 1 1	1 1 1	1 1 1 1	GD05563140 GD05101140 GD05223140 GD05103140 RF05100140	56ΚΩ 100Ω 22ΚΩ 10ΚΩ 10Ω, Fusible		Q401 Q402 Q403 Q404 Q405	1 1 1 1	1 1 1 1	1 1 1 1	HF203691G0 HF203691G0 HF203691G0 HF203691G0 HC10008090	F.E.T. 2SK369(GR) F.E.T. 2SK369(GR) F.E.T. 2SK369(GR) F.E.T. 2SK369(GR) IC 4558DD
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REF.	-	)'T	_	PART NO.	DESCRIPTION
DESIG.	U	N	Α		
0701	1	1	1	UT41200000	T
Q701	1 .		1	HT413022B0	Transistor 2SD1302(S,T)
Q702	1	1	1 -	HT413022B0	Transistor 2SD1302(S,T)
<b>∆</b> 0703	1	1	1	HC10097060	IC μPC1270H
<b>∆</b> Q704	1	1	1	HC10097060	IC μPC1270H
<b>∆</b> Q705	1	1	1	HT325802A0	Transistor 2SC2580(O,Y)
∆ Q706	1	1	1	HT325802A0	Transistor 2SC2580(O,Y)
<b>∆</b> Q707	1	1	1	HT111052A0	Transistor 2SA1105(O,Y)
<b>∆</b> Q708	1	1	1	HT111052A0	Transistor 2SA1105(O,Y)
Q709	1	1	1	HT327851B0	Transistor 2SC2785(J, H)
Q710	1	1	1	HT327851B0	Transistor 2SC2785(J, H)
∆ Q801	1	1	1	HT205072Q0	Transistor 2SB507(E, F)
QK01	1	1	1	HT327852B0	Transistor 2SC2785(J,H)
QK02	1	1	1	HT111752B0	Transistor 2SA1175(J,H)
QK03	1	1	1	HT327852B0	Transistor 2SC2785(J,H)
QK04	1	1	1	HT327852B0	Transistor 2SC2785(J,H)
QK05	1	1	1	HT111752B0	Transistor 2SA1175(J,H)
QS01	1	1	1	HC10110030	IC LC7815H
QS02	1	1	1	HC406603C0	IC LC4066B-H
	10	100			
					P701-MISCELLANEOUS
J401	1	1	1	YL01010110	Terminal, Earth
1.0					
J701	1	1	1	YT03080020	Terminal, Speaker
J702	1	1	1	YJ06002430	Jack, 3P
J703	1	1	1	YL01010110	Terminal, Earth
J801	1	1	1	YP06001050	Plug, 5P
		1	.		
JV01	1			YT02020290	Terminal, RCA Jack; 4P
JV01	1.0	1	1	YT02040470	Terminal, RCA Jack; 4P
JV02	1			YT02060180	Terminal, RCA Jack; 4P
JV02		1	1	YT02040470	Terminal, RCA Jack; 4P
JV03	1	1	1	YT02040470	Terminal, RCA Jack; 4P
100	, P.				
JS01	1	1	1	YJ06002430	Jack, 3P
JS02	1	1	1	YJ06002460	Jack, 7P
JS03	1	1	1	YJ06002270	Jack, 8P
			.		3331,31
L701	1	1	1	LL23905120	Coil, 1µH
L702	1	1	1	LL23905120	Coil, 1µH
2,02	'	'	۱' ا	LL23303120	Con, 1411
S401	1	1	1	SP04010470	Push Switch, Phono MM/MC
0-0.	'		<i>'</i>	0.040.0470	1 dan ownen, i nono wiw,wie
W701	1	1	1	YU02220260	Jumper Lead, 2P
W701	1	1	1	YU03300260	Jumper Lead, 3P
W702 W703	1	1	1	YU03300260	Jumper Lead, 3P
W703 W704	1	1	1	YU04140260	Jumper Lead, 3P  Jumper Lead, 4P
**/04	[ ' ]	'	•	140200	Jumper Leau, 41
			1		
					PE01-VOLUME
					•
DEA4	۱,			VKOCOLIACCO	CIRCUIT BOARD
PE01	1	1	1	YK262H1620	P.W. Board, Volume
}	1	1	1	ZZ262H1620	P.W. Board Assembly
					DE01 04B40:7050
0504	,			E A 47E05000	PE01-CAPACITORS
CE01	1	1	1	EA47505030	Elect 4.7μF 50V
CE02	1	1	1	EA47505030	Elect 4.7μF 50V
CE03	1	1	1	EA22602530	Elect 22μF 25V
CE04	1	1	1	EA22602530	Elect 22μF 25V
CE05	1	1	1	DD15220370	Ceramic 22pF ±5%
CE06	1	1	1	DD15220370	Ceramic 22pF ±5%
CE07	1	1	1	EA22601630	Elect 22µF 16V
CE08	1.	1	1	EA22601630	Elect 22μF 16V
CE09	1	1	1	EA47505030	Elect 4.7μF 50V
CE10	1	1	1	EA47505030	Elect 4.7µF 50V
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REF. DESIG.	U	N N	Y	PART NO.	DESCRIPTION
CE11 CE12 CE13 CE14 CE15 CE16 CE17 CE18 CE19 CE20	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	DF16472350 DF16472350 DF16183350 DF16183350 DF16823350 DF16823350 EA33405030 EA33405030 EA10505030	Film 4700pF $\pm 10\%$ Film 4700pF $\pm 10\%$ Film 0.018 $\mu$ F $\pm 10\%$ Film 0.018 $\mu$ F $\pm 10\%$ Film 0.082 $\mu$ F $\pm 10\%$ Film 0.082 $\mu$ F $\pm 10\%$ Elect 0.33 $\mu$ F 50V Elect 0.33 $\mu$ F 50V Elect 1 $\mu$ F 50V Elect 1 $\mu$ F 50V
CE21 CE22 CE23 CE24 CE25 CE26 CE27 CE28 CE29 CE30	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1	EA47505030 EA47505030 DF16183350 DF16183350 DD15331370 DD15331370 DF16683350 DF16683350 DD15220370 DD15220370	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
RE01 RE02 RE03 RE04 RE05 RE06 RE07 RE08 RE09 RE10	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	GD05104140 GD05104140 GD05223140 GD05223140 GD05104140 GD05103140 GD05103140 GD05103140 GG05101140 GG05101140	PE01-RESISTORS (All Resistors are $\pm$ 5% and %W) 100 K $\Omega$ 100 K $\Omega$ 22 K $\Omega$ 22 K $\Omega$ 100 K $\Omega$ 100 K $\Omega$ 100 K $\Omega$ 100 K $\Omega$ 10 K $\Omega$ 10 K $\Omega$ 10 K $\Omega$ 10 C $\Omega$ 10 O $\Omega$ 100 $\Omega$ 100 $\Omega$
RE11 RE12 RE13 RE14 RE15 RE16 RE17 RE18 RE19 RE20	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	GD05331140 GD05331140 GD05331140 GD05331140 GD05104140 GD05104140 GD05333140 GD05333140 GD05183140 GD05183140	330Ω 330Ω 330Ω 100ΚΩ 100ΚΩ 33ΚΩ 33ΚΩ 18ΚΩ 18ΚΩ
RE21 RE22 RE23 RE24 RE25 RE26 RE27	1 1 1 1 1 1	111111	1 1 1 1 1 1	RS05030520 RS05030520 RS05030520 RS05030520 RS05030520 RM01040840 RX02040080	$50 \mathrm{K}\Omega(\mathrm{B})$ , Variable $100 \mathrm{K}\Omega(\mathrm{B})$ , Variable $200 \mathrm{K}\Omega(\mathrm{W})$ , Variable
RY01 RY02 RY03 RY04 RY05 RY06 RY07 RY08 RY09 RY10	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	GD05471140 GD05104140 GD05471140 GD05104140 GD05471140 GD05104140 GD05104140 GD05471140 GD05471140 GD05104140	470Ω 100ΚΩ 470Ω 100ΚΩ 470Ω 100ΚΩ 470Ω 100ΚΩ 470Ω 100ΚΩ
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REF.	$\overline{}$	)'T	Y	PART NO.	DESCRIPTION
DESIG.	U	N	A		
QE01 QE02 QE03	1 1 1	1 1 1	1 1 1	HC10108030 HC10108030 HC10008090	PE01-SEMICONDUCTORS IC STK6325A IC STK6325A IC 4558DD
QY01 { QY05	5	5	5	HT111752B0	Transistor 2SA1175(J, H)
SE01 SE02	1	1	1	SP02011090 SP02011090	PE01-MISCELLANEOUS Push Switch, Loudness Push Switch, Low Filter
SY01 SY02 SY03 SY04 SY05	1 1 1 1	1 1 1 1	1 1 1 1	SP01010840 SP01010840 SP01010840 SP01010840 SP01010840	Push Switch, Tape 1 Push Switch, Phono Push Switch, Tape 2 Push Switch, CD Push Switch, Tuner
VY01 { VY05	5	5	5	IN10080620	Lamp
WE01 WE02	1	1	1	YU03160260 YU03240260	Jumper Lead, 3P Jumper Lead, 3P
WY01 WY02	1	1	1	YU07160260 YU08160260	Jumper Lead, 7P Jumper Lead, 8P
PN01	1	1	1	YK262H1630 ZZ262H1630	PN01-SPEAKER SWITCH CIRCUIT BOARD P.W. Board, Speaker Switch P.W. Board Assembly
SN01	1	1	1	SP04020440	Push Switch, Speaker-1
SN02	1	1	1	SP04020440	Push Switch, Speaker-2
WN01	1	1	1.	YU03120260	Jumper Lead, 3P
PPO1	1	1	1	YK262H1640 ZZ262H1640	PP01-POWER SWITCH CIRCUIT BOARD P.W. Board, Power Switch P.W. Board Assembly
∆G001	1	1	1	DK18103840	Ceramic Cap. 0.01µF 250V
<b>∆</b> S001	1	1	1	SP01010650	Push Switch, Power
3					

	REF.	ľ	\ <del>'</del> T'			<del></del>						
	DESIG.	_	)'T'		PART NO.	DESCRIPTION						
╟	DESIG.	U	N	Α								
	PW01	1	1	1	YK262H1650 ZZ262H1650	PW01-HEADPHONE JACK CIRUCUIT BOARD P.W. Board, Headphone Jack P.W. Board Assembly						
	~ RW01 RW02	1	1	1 1	GA05331010 GA05331010	Resistor $330\Omega$ $\pm 5\%$ 1W Resistor $330\Omega$ $\pm 5\%$ 1W						
	JW01	1	1	1	YJ01001790	Jack, Headphone						
	PX01	1	1	1	YK262H1660 ZZ262H1660	PX01-SPEAKER LAMP CIRCUIT BOARD P.W. Board, Speaker Lamp P.W. Board Assembly						
	VX01 VX02	1	1	1	IN10080620 IN10080620	Lamp 8V 50mA Lamp 8V 50mA						
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(WO1-99)	Assembly and Wiring	-		
(T01-99)	Adjustment			
(X01-00)	Correction	ε.		*

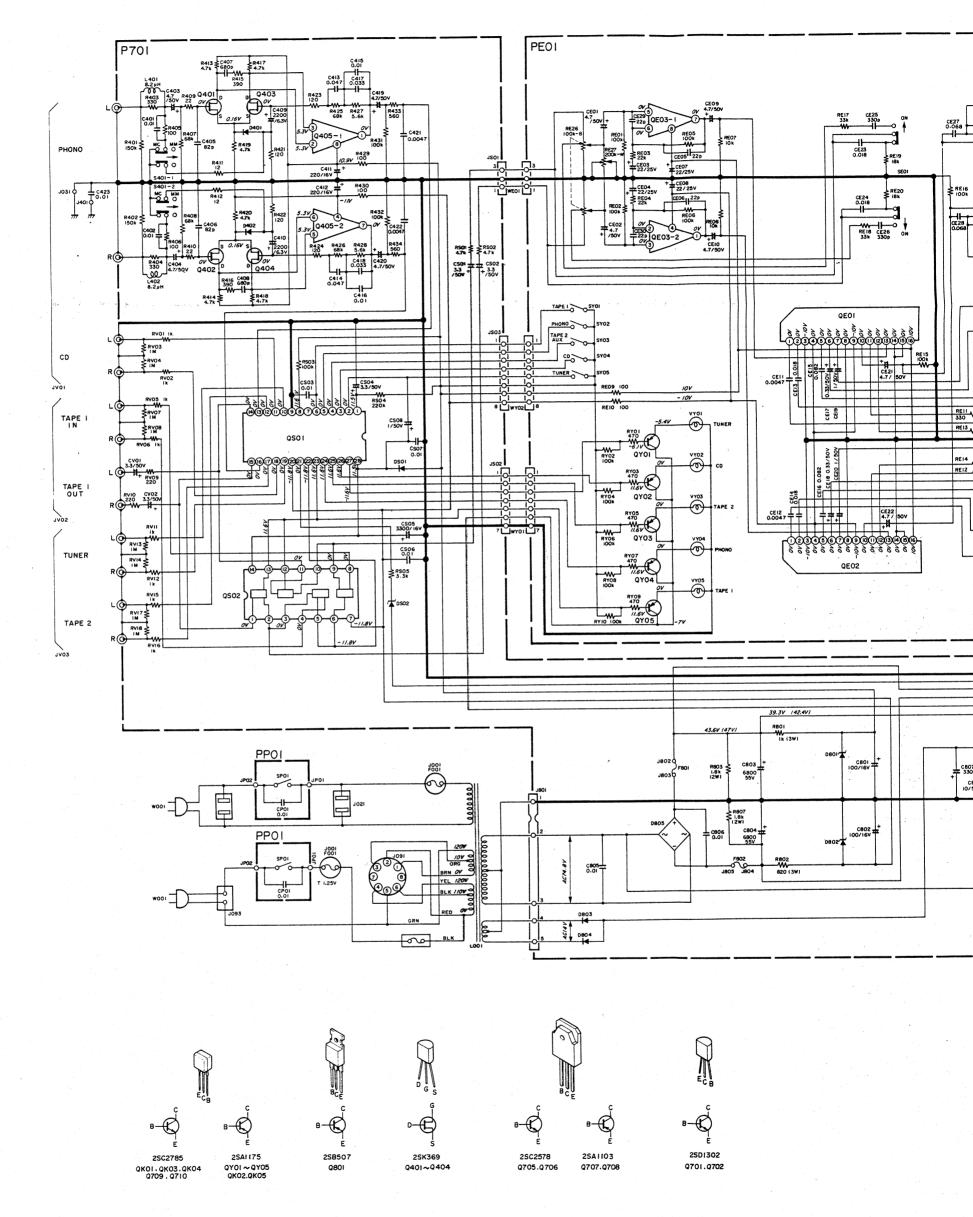
#### NOTE ON SAFETY:

Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

# 11. TECHNICAL SPECIFICATIONS

AUDIO SECTION	
POWER OUTPUT PER CHANNEL  DIN 4 OHMS	
MM CARTRIDGE INPUT	
Frequency Response (RIAA) 20 Hz - 20 kHz) ±0.5 dB Signal-to-Noise Ratio 80 dB Input Impedance 47 k ohms Input Capacitance 100 pF Input Sensitivity 2.5 mV	
MC CARTRIDGE INPUT	
AUX. INPUT	
Input Impedance         25 k ohms           Input Sensitivity         150 mV           Frequency Response (±2 dB)         10 Hz - 50 kHz           Signal-to-Noise Ratio         93 dB	
Tape Out (Input 7.75 mV)	
OUTPUT IMPEDANCE	
Tape Out	
GENERAL	
Power Requirements	
Dimensions	
Unit Alone 5.3 kg	

# 12. SCHEMATIC DIAGRAM



# NOTE ON SAFETY:

Symbol  $\triangle$  Fire or electrical shock hazard. Only original parts should be used to replace any part marked with symbol  $\triangle$ . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

# **Model PM440**

